United States Department of the Interior

NATIONAL PARK SERVICE
Channel Islands National Park
1901 Spinnaker Drive
Ventura, California 93001-4354

IN REPLY REFER TO:

N1621- CHIS

October 2, 2009

Ms. Catherine Reheis-Boyd
Chair, Blue Ribbon Task Force
Marine Life Protection Act Initiative
c/o California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Ms. Reheis-Boyd:

At the September 9-10, 2009 South Coast Regional Stakeholders Group Workshop, the video "The Case for Adaptive Management in Marine Reserves" produced by the California Sea Urchin Commission was shown during at least one workgroup sessions and during the public comment period. The National Park Service was asked our understanding by several stakeholders of the conditions of the marine environment since the video is based along monitoring transects we established as part of our kelp forest monitoring program.

It is clear that the California Sea Urchin Commission (CSUC) put some effort towards producing a product that is pleasing to watch. However, it is also clear that the CSUC has taken a very narrow snapshot of a very limited area and attempted to draw broad conclusions regarding management. Fortunately, there is a substantial and long-term history of ecological monitoring at the five northern islands within Channel Islands National Park (including San Miguel and Anacapa Islands) which can be used to evaluate some of the assertions in the video. Specifically, the CSUC video states that urchins are a pest species and that human harvest must occur in order to avoid "urchin barrens".

Interestingly, our monitoring data indicates that the Hare Rock monitoring site at San Miguel Island has been a red urchin barren for 23 of the past 28 years (1982 to 2009). Hare Rock was a red urchin barren for all of the years that the site was open to urchin harvest (pre 2003). The only years that park biologists detected substantial kelp at this site were 2003, 2004, 2005, 2006, and 2007; all following establishment of the Marine Protected Area (MPA) and the elimination of harvest. In 2008 and 2009 the monitoring site reverted to red urchin barren. Thick patches of kelp persist in the marine reserve near the monitoring site. These patches of kelp are easily visible in the CSUC video.

Park biologists annually video tape each transect as part of the park's kelp forest monitoring program. Enclosed is a timeline of representative snapshots from videos from the Hare Rock (San Miguel Island) and Landing Cove (Anacapa Island) monitoring sites between 1983 and 2009. Also included, are graphs of the sea urchin densities for each of these years.

We include the Anacapa Landing Cove photos and data to refute the contention that human harvest is required to support kelp forests and control urchin barrens. The Anacapa Landing Cove, closed to harvest since 1978, has consistently had some of the lowest densities of urchins and most stable kelp cover of all the monitoring sites in the park.

In 2008, the California Department of Fish and Game, in collaboration with partners such as Channel Islands National Park, produced an assessment of the effects of the Channel Islands MPAs in their first five years. We highlight some findings from the Report that relate specifically to the issues brought up in the CSUC video.

a) SCUBA surveys in nearshore waters found that fish species actively targeted by fishermen tend to be bigger and more plentiful inside reserves than in fished areas at the Channel Islands. Sheephead, an important sea urchin predator is one of the fish that are increasing in density and size in the marine reserves.
b) ROV surveys in deeper waters found that eight out of twelve fish species were more numerous in marine reserves. Seven of those eight species are targeted by fishermen outside the reserves.
c) Surveys in conjunction with CALobster found that lobster populations inside reserves have higher proportions of large individuals and that traps inside reserves consistently had equal or higher yields than traps outside.
d) PISCO surveys show that on average reserves harbor 2.6 times more biomass of predatory fish which are targeted by fishermen outside reserves.

The above statements highlight the importance of scientific evaluation of the network of marine reserves before reaching conclusions based on a single site or species. We do not know how the Hare Rock site will change over time with the exclusion of harvest. Some sea urchin barrens may be a natural part of the mosaic of habitats that creates overall diversity. Marine reserves allow an area where natural processes can prevail and where scientific study can help to understand the ecological relationships within the natural system. We eliminate the ability to understand the role of predators or the role of grazers in the marine ecosystem if there aren't some areas set aside where those species are not being harvested.

We trust that the Blue Ribbon Task Force will be able to step back and reflect on the broad importance of a network of protected areas where no harvest is permitted. At the Channel Islands, the vast majority of the marine waters are open to harvest. Less than 20% of the State waters at the Channel Islands are closed to all harvest. These marine reserves are important not just for protection of biological diversity, but also for understanding the effects of harvest and ensuring there are small areas where ecological interactions reflect natural abundance.

Sincerely,

Russell E. Galipeau, Jr.
Superintendent

Enclosures (2)

cc: Dr. Steven Murray, Science Advisory Team, MLPA, 1416 Ninth Street, Suite 1311, Sacramento, CA 95814
Mr. Vern Goehring, Executive Director, California Sea Urchin Commission, 1621B 13th Street, Sacramento, CA 95814